AMENDMENTS TO THE CLAIMS

Applicants submit below a complete listing of the current claims, including marked-up claims with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing. This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently amended) A system that facilitates utilizing an optical medium, the system comprising at least one processor programmed to:

~~a component that provides~~ provide concurrent recordation of data from the optical medium and playback of data from [[an]] the optical medium, the playback starting at time (t_x) and the recordation starting at time (t_y), wherein $t_x \neq t_y$.

2. (Currently amended) The system of claim 1, wherein recordation ~~refers to~~ comprises recordation of a non-real-time data stream.

3. (Currently amended) The system of claim 1, wherein playback ~~refers to~~ comprises playback of a real-time data stream.

4. (Currently amended) The system of claim 3, ~~the component~~ wherein the at least one processor is further programmed to dynamically adjust[[s]] required data rates for the real-time data stream.

5. (Currently amended) The system of claim 1, ~~comprising a verification component that~~ wherein the at least one processor is further programmed to determine[[s]] data transfer capabilities of the optical medium.

6. (Currently amended) The system of claim 5, the data transfer capabilities comprising at least one parameter selected from the group consisting of minimum data transfer rate, read speed, burn speed, seek times and buffer size.

7. (Currently amended) The system of claim 1, the optical medium comprising ~~at least one of:~~ a compact disc [[and]] or a digital video disc (DVD).

8. (Original) The system of claim 1, the optical medium comprising audio data.

9. (Currently amended) The system of claim 1, further comprising at least one buffer that holds information from playback of data from the optical medium.

10. (Currently amended) The system of claim 9, wherein the at least one buffer has a minimum buffer capacity~~, the minimum buffer capacity~~ that is a function of read speed and at least one seek time.

11. (Currently amended) The system of claim 1, further comprising a buffer controller that controls ~~at least one of~~ creation and/or use of at least one buffer.

12. (Currently amended) The system of claim 11, wherein the buffer controller performs a utility-based analysis in connection with buffer access.

13. (Currently amended) The system of claim 12, wherein the utility-based analysis is based at least in part on a probabilistic-based determination of cost associated with saving data to the at least one buffer.

14. (Currently amended) The system of claim 12, wherein the utility-based analysis is based at least in part on a probabilistic-based determination of cost associated with retrieving data from the at least one buffer.

15. (Currently amended) The system of claim 1, wherein the optical medium has a guaranteed minimum data transfer rate.

16. (Currently amended) The system of claim 15, wherein the guaranteed minimum data transfer rate is at least about 176 [[KBps]] kilobytes per second.

17. (Currently amended) The system of claim 1, ~~comprising a component that~~ wherein the at least one processor is further programmed to provide[[s]] concurrent playback of a plurality of data streams from the optical medium.

18. (Original) The system of claim 17, the data streams comprising audio data.

19. (Currently amended) The system of claim 17, the plurality of data streams comprising at least a first data stream and ~~at least~~ a second data stream, such that the first data stream starts playing at t_x and the second data stream starts playing at t_y, wherein $t_x \neq t_y$.

20. (Currently amended) The system of claim 1, ~~comprising a continuity component that~~ wherein the at least one processor is further programmed to provide[[s]] concurrent recordation of a plurality of data streams in parallel from the optical medium.

21. (Currently amended) The system of claim 20, the plurality of data streams comprising at least a first data stream and ~~at least~~ a second data stream, such that the first data stream starts recording at t_x and the second data stream starts recording at t_y, wherein $t_x \neq t_y$.

22. (Currently amended) The system of claim 20, ~~the continuity component~~ wherein the at least one processor is further programmed to analyze[[s]] a subset of the data streams and dynamically order[[s]] reading of respective data streams of the subset to mitigate stream break-up.

23. (Currently amended) The system of claim 20, ~~the continuity component~~ wherein the at least one processor is further programmed to analyze[[s]] a subset of the data streams, [[and]] dynamically prognose[[s]] potential starvation of any of the data streams, and take[[s]] remedial action to mitigate the starvation.

24. (Currently amended) The system of claim 23, ~~the continuity component employs~~ wherein the at least one processor is programmed to prognose potential starvation using a probabilistic-based utility analysis ~~in connection with providing a prognosis~~.

25. (Currently amended) A method of utilizing optical media, the method comprising:

initiating a first operation comprising reading data from the optical media at time t_x; and

initiating at least a second operation comprising reading data from the optical media at time t_y while the first operation is currently in progress, wherein $t_x \neq t_y$.

26. (Original) The method of claim 25, the first operation comprising reading a real-time data stream.

27. (Currently amended) The method of claim 25, the ~~at least a~~ second operation comprising ~~one of~~ reading a real-time data stream [[and]] or a non-real-time data stream.

28. (Currently amended) The method of claim 26, further comprising transferring the real-time data stream to a first buffer for temporary storage at a sufficient rate to allow [[the]] a data stream associated with the second operation to transfer to a second buffer without interrupting the first operation.

29. (Currently amended) The method of claim 28, further comprising:

before the second operation begins, determining whether a calculated cost of accessing the optical media exceeds ~~any one of the following:~~ a threshold and/or a calculated cost of retrieving [[the]] data ~~stored in~~ from the first buffer; and

retrieving [[the]] data from the first buffer during the second operation when the calculated cost of accessing the optical media exceeds ~~at least one of~~ the threshold and/or the calculated cost of retrieving [[the]] data from the first buffer.

30. (Currently amended) The method of claim 25, further comprising verifying data transfer

capabilities of an optical hardware device ~~that is~~ employed to run the optical media.

31. (Currently amended) The method of claim 30, verifying the data transfer capabilities comprising performing at least one ~~of the following~~ act selected from the group consisting of:

~~checking the optical hardware device to determine~~ determining whether [[it]] the optical hardware device is running in constant angular velocity (CAV) mode;

determining at least one of seek times and read performance across the optical media for reading a non-real time data stream from the optical media; and

determining whether minimum buffer requirements are satisfied.

32. (Currently amended) The method of claim 31, determining read performance across the optical media to facilitate ascertaining the optical hardware device's ability to read the optical media comprising:

reading at least a first amount of data from a first position on the optical media such that ~~the device's~~ an internal media cache of the optical hardware device is not concurrently caching the first amount of data when the reading of the first amount of data starts; [[and]]

~~skipping ahead~~ reading at least a second amount of data from a second position on the optical media, wherein the second position is separated from the first position by data representing an increment of playback time that is sufficient ~~to gain~~ for determining characteristic read performances across the optical media; and

~~repeat~~ reading ~~the amount of~~ data from other positions on the optical media [[until]] to determine read performances across substantially all of the optical media ~~is read~~.

33. (Currently amended) The method of claim 32, the first amount of data being about 8 [[MB]] megabytes.

34. (Currently amended) The method of claim 32, the increment of playback time being about 5 minutes.

35. (Currently amended) The method of claim 32, wherein [[each]] the second amount of data

is substantially equal in size to the first amount of data.

36. (Currently amended) The method of claim 32, wherein the first amount of data is determined based at least in part upon ~~the device's~~ an internal buffer size of the optical hardware device.

37. (Currently amended) The method of claim 31, determining seek times across the optical media to facilitate ascertaining the optical hardware device's ability to seek on the optical media comprising:

dividing the optical media into a number of sections, the number of sections comprising at least a first section and at least a second section, such that ~~the device's~~ an internal cache of the optical hardware device does not pre-cache [[the]] data from the second section when told to ~~read the~~ start [[of]] reading from the first section; and

for all pairs of sections comprising any two sections, ensuring that the optical hardware device is reading from the first section and then causing the [[drive]] optical hardware device to seek to the second section to gain characteristic seek performances across the optical media.

38. (Original) The method of claim 37, wherein all sections are of substantially equal size.

39. (Currently amended) The method of claim 37, wherein ~~the section~~ a size of the sections is determined based at least in part upon ~~the device's~~ an internal buffer size of the optical hardware device.

40. (Currently amended) The method of claim 37, wherein ensuring ~~to read~~ that the optical hardware device is reading from the first section comprises reading an amount of data larger than ~~the device's~~ an internal buffer size of the optical hardware device from [[some]] a section other than the first and second sections.

41. (Currently amended) The method of claim 37, wherein ensuring ~~to read~~ that the optical hardware device is reading from the first section comprises sending a READ10 command with a

force unit access (FUA) bit set to one.

42. (Currently amended) The method of claim 37, wherein causing the [[drive]] optical hardware device to seek to the second section comprises using a READ10 command with a force unit access (FUA) bit set to one.

43. (Currently amended) The method of claim 37, wherein causing the [[drive]] optical hardware device to seek to the second section comprises using a SEEK command.

44. (Currently amended) The method of claim 37, wherein ~~the section~~ a size of the sections is about 5 minutes.

45. (Currently amended) The method of claim 37, wherein ensuring ~~to read~~ that the optical hardware device is reading from the second section comprises reading an amount of data larger than ~~the device's~~ an internal buffer size of the optical hardware device from the first section.

46. (Original) The method of claim 31, the minimum buffer requirements being a function of read speed and seek times.

47. (Currently amended) A method of utilizing optical media, the method comprising:

starting to read at least a first real-time data stream from the optical media at time t_x; and

starting to read at [[a]] least a second real-time data stream from the optical media concurrently with the first real-time data stream at time t_y, wherein $t_x \neq t_y$.

48. (Original) The method of claim 47, the first data stream being played via a first playback output and the second data stream being played via a second playback output.

49. (Currently amended) A method of utilizing optical media, the method comprising:

starting to read at least a first non-real-time data stream from the optical media at time t_x; and

starting to read at [[a]] least a second non-real-time data stream from the optical media

concurrently with the first non-real-time data stream at time t_y, wherein t_x is not equal to t_y.

50. (Currently amended) A ~~data packet adapted to be transmitted between two or more computer processes~~ method for facilitating reading multiple concurrent data streams from optical media, the ~~data packet~~ method comprising:

transmitting a data packet between two or more computer processes, the data packet comprising information associated with reading a real-time data stream from the optical media at time t_x and concurrently reading a non-real-time data stream from the optical media at time t_y, wherein $t_x \neq t_y$.

51. (Currently amended) [[A]] At least one computer-readable storage medium having stored thereon the following computer executable components:

a component that provides for concurrently reading a non-real-time data stream from optical media starting at time t_y and reading a real-time data stream from the optical media starting at time t_x, wherein $t_x \neq t_y$.

52. (Currently amended) A system that facilitates employment of optical media, the system comprising at least one processor programmed to:

~~means for starting~~ start to read at least one real-time data stream from the optical media at time t_x; and

~~means for starting~~ start to read one or more non-real-time data streams from the optical media ~~concurrently while it is playing~~ at time t_y, concurrently while reading the at least one real-time data stream, wherein $t_x \neq t_y$.

53. (Currently amended) A recording system, comprising at least one processor programmed to:

~~a component that~~ provide[[s]] concurrent recordation of and playback of respective media from an optical medium, the playback starting at time (t_x) and the recordation starting at time (t_y), wherein $t_x \neq t_y$; and

~~an artificial intelligence (AI) component that~~ perform[[s]] a utility-based analysis in

connection with the recordation and playback.

54. (Currently amended) The system of claim 53, ~~the AI component comprising~~ wherein the at least one processor is programmed to perform the utility-based analysis using a classifier.

55. (Currently amended) The system of claim 53, ~~the AI component~~ wherein the at least one processor is programmed to perform the utility-based analysis by inferring when to initiate recordation.

56. (Currently amended) The system of claim 53, ~~further comprising a verification component that~~ wherein the at least one processor is further programmed to determine[[s]] data transfer capabilities of the optical medium.

57. (Currently amended) The system of claim [[53]] 56, the data transfer capabilities comprising at least one parameter selected from the group consisting of minimum data transfer rate, read speed, burn speed, seek times and buffer size.

58. (Currently amended) The system of claim 53, ~~the AI component comprising~~ wherein the at least one processor is programmed to perform the utility-based analysis using at least one tool selected from the group consisting of: [[a]] at least one support vector machine (SVM), [[a]] at least one naïve Bayes model, [[a]] at least one Bayesian network, [[a]] at least one decision tree, [[a]] at least one Hidden Markov Model (HMM), at least one neural network, and at least one data fusion engine.